What is claimed is:

1. An apparatus for therapeutic treatment of a patient (2) using magnetic fields (B0, B1, 55B, 56B) comprising at least one first device (30B) for production of a first magnetic treatment field (B0, B1, 55B, 56B) within a first treatment area (50B),
a rest (1C) for the patient (2) to rest on, in such a manner that a body region of the patient (2) to be treated is positioned in the first treatment area (50B) once the patient (2) is in place on the apparatus and the apparatus is in an operating position,
at least one first cantilever arm (4B), which projects out of the plane defined by the rest (1C), with the first device (30B) being arranged on the first cantilever arm (4B) in order to produce the first magnetic treatment field.

2. The apparatus as claimed in claim 1,
with the apparatus being in the form of a treatment seat (1), and the rest (1C) being formed by the backrest of the treatment seat (1).

3. The apparatus as claimed in one of the preceding claims, with the cantilever arm (4B) comprising a contact section (45B), which is at a distance from the rest and on which the first device (30B) for production of the first magnetic treatment field is arranged, and which contact section (45B) is suspended such that it can move, and can make contact with the body region of the patient to be treated.

4. The apparatus as claimed in one of the preceding claims, with the cantilever arm (4B) being fitted to the

apparatus such that it can pivot.

5. The apparatus as claimed in one of the preceding claims, with the cantilever arm (4B) being designed such that it can pivot on a plane transversely with respect to the rest plane, and making contact with the patient (2) at the side.

6. The apparatus as claimed in one of the preceding claims, with the cantilever arm having a plurality of joints (44B) which form a joint chain.

7. The apparatus as claimed in one of the preceding claims, with a stabilization strip being woven through the joint chain.

8. The apparatus as claimed in one of the preceding claims, with the cantilever arm (4B) having an outer casing, and the first device (30B) for production of the first magnetic treatment field, and the joints (44B) being arranged within the casing.

9. The apparatus as claimed in one of the preceding claims, with the cantilever arm (4B) having an essentially flat cross section and being able to make contact with the body region of the patient (2) to be treated with its flat face by means of the pivoting process.

10. The apparatus as claimed in one of the preceding claims, with the apparatus having at least one second cantilever arm (4C) which projects out of the plane defined by the rest (1C), with a second device (30C) for production of a second magnetic treatment field being arranged in a

second treatment area (50C) on the second cantilever arm (4C) in such a manner that a body area of the patient (2) can be positioned between the first and second devices (30B, 30C).

11. The apparatus as claimed in one of the preceding claims, with the apparatus having a third device (30A) for production of a third magnetic treatment field in a third treatment area (50A), with the third device (30A) being arranged on the rest (1C), and with the first, second and third devices (30B, 30C, 30A) being arranged essentially in a U-shape.

12. The apparatus as claimed in one of the preceding claims, with the first and second devices (30B, 30C) being arranged at the side of the head (2A) of the patient (2) and the third device (30A) being arranged in the area of the back of the head or the spinal column of the patient (2), when the patient is in position on the apparatus and the apparatus is in the operating position.

13. The apparatus as claimed in one of the preceding claims, with the apparatus having a movement device (3A, 4A) on which the first and second cantilever arms (4B, 4C) are suspended, in order to move the first and second devices (30B, 30C) essentially along the body axis (1) of the patient (2).

14. The apparatus as claimed in one of the preceding claims, with the movement device (3A, 4A) having at least one rail (9A, 9B), which is attached to the rear face (1G) of the rest (1C), and with the first and second cantilever arms (4B, 4C) being attached to a carriage (8A, 8B) which is

arranged on the at least one rail (9A, 9B) such that it can move along the rest (1C).

15. The apparatus as claimed in one of the preceding claims, having a locking device (7, 11, 12) in order to lock the movement of the carriage (8A, 8B).

16. The apparatus as claimed in one of the preceding claims, with the first and second cantilever arms (4B, 4C) being detachably attached to the movement device (3A, 4A) in order to replace the cantilever arms (4B, 4C).

17. The apparatus as claimed in one of the preceding claims, with the first device (30B) for production of the first magnetic treatment field having at least one first (51B) and second (52B, 53B) magnetic field generator, with the first and second magnetic field generators respectively being in the form of a first and second coil system.

18. The apparatus as claimed in one of the preceding claims, with the first magnetic treatment field being formed by a superimposition of the magnetic field (B0, B1, 55B, 56B) of the first and second magnetic field generators (51B, 52B, 53B) and with these two magnetic fields being superimposed essentially at right angles in the first treatment area (50B).

19. The apparatus as claimed in one of the preceding claims, with the first device (30B) for production of the first magnetic treatment field having an essentially flat cross section, and the coils of the first and second coil system being arranged on the same plane as that which forms the coil plane (7-7), with the coil plane being arranged

transversely with respect to the rest plane.

20. The apparatus as claimed in one of the preceding claims, with the first coil system having a basic coil (51B) and the second coil system having two RF coils (52B, 53B).

21. The apparatus as claimed in one of the preceding claims, with the two RF coils (52B, 53B) being arranged alongside one another and being connected in opposite senses.

22. The apparatus as claimed in one of the preceding claims, with the two RF coils (52B, 53B) being arranged parallel within the coil opening of the basic coil (51B).

23. The apparatus as claimed in one of the preceding claims, with the two RF coils (52B, 53B) producing an alternating magnetic field during operation.

24. The apparatus as claimed in one of the preceding claims, with the first device (30B) for production of the first magnetic treatment field forming an arrangement for production of nuclear magnetic resonance, with the basic coil (51B) producing a basic magnetic field (B0, 55B) during operation, in which the nuclei to be excited precess, and a resonant alternating electromagnetic field (B1, 56B) is injected by means of the RF coils (52B, 53B).

25. The apparatus as claimed in one of the preceding claims, with the magnetic induction of the basic magnetic field (B0) being between 0.1 Gauss and 1000 Gauss, in particular between 1 Gauss and 100 Gauss.

26. The apparatus as claimed in one of the preceding claims, having means for periodic production of nuclear magnetic resonances.

27. The apparatus as claimed in one of the preceding claims, with the repetition frequency of the periodic nuclear magnetic resonance excitation being 1 Hz to 1000 Hz, in particular 5 Hz to 40 Hz.

28. A method for production of an apparatus for therapeutic treatment of jaw arthrosis, parodontitis, degenerative jawbone changes or for assistance to the ingrowth of implants, with at least one device (30B) for production of magnetic fields being used.

29. A method for production of an apparatus for therapeutic treatment of tinnitus, with at least one device (30B) for production of magnetic fields being used.

30. A method for production of an apparatus for collagen formation in the living body, with at least one device (30B) for production of magnetic fields being used.

31. A method for therapeutic treatment of jaw arthrosis, parodontitis, degenerative jawbone changes or to assist the ingrowth of implants by means of magnetic fields.

32. A method for therapeutic treatment of tinnitus by means of magnetic fields.

33. A method for cosmetic treatment by means of magnetic fields.

34. A method as claimed in one of the preceding claims, with collagen formation in the living body being achieved by means of magnetic fields.